

CLAIMS:

1. A projection system having a projection display (20), at least one light source (10), and a sensor means for sensing and compensating for changes in the luminous flux emitted by the at least one light source (10), which means has at least one sensor arrangement (30; 31, 32; 33, 34) for sensing components (M) of the light from the light source (10) that
5 are directed into a region surrounding an entering face of an optical component (11) of the projection system.
2. A projection system as claimed in claim 1, wherein a driver means (20a) for driving the projection display (20) can be controlled by the sensor arrangement (30; 31, 32;
10 33, 34) to compensate for fluctuations in the luminous flux.
3. A projection system as claimed in claim 1, wherein a power supply unit (10c) of the at least one light source (10) can be controlled by the sensor arrangement (30; 31, 32;
15 33, 34) to compensate for the fluctuations in the luminous flux.
4. A projection system as claimed in claim 1, wherein the sensor arrangement is formed by a plurality of sensors (30) that are arranged along the circumference of the optical component (11) and are directed at the light source (10).
- 20 5. A projection system as claimed in claim 1, wherein the sensor arrangement is formed by an optical waveguide structure (31), surrounding the optical component (11), to couple in incident light from the light source (10), and at least one sensor (32) to sense the light that is coupled in.
- 25 6. A projection system as claimed in claim 1, wherein the sensor arrangement is formed by a surface (33), surrounding the optical component (11), to scatter incident light coming from the light source (10), and a sensor (34) to sense the light that is scattered.

7. A projection system as claimed in claim 6, wherein the sensor (34) is arranged substantially next to the light source (10) in a direction perpendicular to the direction of propagation of the light produced by the light source (10).

5 8. A projection system as claimed in claim 1, wherein the optical component is a rod integrator (11) for homogenizing the light produced by the light source (10).

9. A projection system as claimed in claim 1, having a color display for sequential color representation and, as a light source (10), at least one high-pressure gas-
10 discharge lamp operated by alternating current.